

## STATE OF SOUTH DAKOTA CLASS SPECIFICATION

**Class Title: Chief Cartographer**

**Class Code: 40438**

**Pay Grade: GI**

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### **A. Purpose:**

Manages mapping section activities to ensure mapping meets national map accuracy standards.

### **B. Distinguishing Feature:**

Chief Cartographers plan, implement, and provide cartographic and graphic services. Cartographers research, compile, and enter data into a specialized system to produce maps through automated mapping.

### **C. Functions:**

*(These are examples only; any one position may not include all of the listed examples nor do the listed examples include all functions which may be found in positions of this class.)*

1. Provides technical assistance to subordinates, managers, and other agencies to ensure they have current cartographic information.
  - a. Edits, reviews, and approves maps prepared by others.
  - b. Assists managers and other state agencies to develop maps and purchase necessary equipment to produce maps.
  - c. Distributes maps and other cartographic materials to the public and other state agencies.
2. Performs drafting and mapping functions to prepare special projects.
  - a. Prepares special purpose maps, charts, graphs, and overlays to include in presentations and publications.
  - b. Prepares and updates the official state tourist map.
  - c. Drafts procedural diagrams for electronic traffic monitoring.
3. Researches the capabilities of the computer aided drafting (CADD) system by writing and testing user commands and menus to enhance the production of maps.
4. Provides administrative support to ensure the objectives of the work unit are met.
  - a. Recommends mapping budget.
  - b. Develops new methods and policies for producing maps.
  - c. Creates specifications for commercial printing of maps.
  - d. Represents the department at state and national meetings and workshops regarding graphics and cartography.
  - e. Represents the mapping section in the development of the Geographic Information Systems (GIS).
5. Performs other work as assigned.

### **D. Reporting Relationships:**

Reports to a Program Manager. Does not supervise.

### **E. Challenges and Problems:**

Challenged to stay abreast of developments in computer hardware and software that expedite mapping. This is difficult because of rapidly changing technology and time constraints.

Problems include finding solutions to computer aided drafting problems, prioritizing mapping projects, and ensuring equipment purchases meet needs.

#### **F. Decision-making Authority:**

Decides what mapping equipment to purchase, extent of map inventory, priority of mapping projects, which plotter to use in map production, recommends format of the state tourist map, and recommends who to hire and disciplinary actions.

Decisions referred include final approval of purchase of new equipment; and final approval of goals, objectives, and procedures of the mapping program.

#### **G. Contact with Others:**

Daily contact with the public regarding map purchases; monthly contact with the Office of Tourism regarding the tourist map; and frequent contact with other state agencies to assist with mapping projects.

#### **H. Working Conditions:**

Typical office environment.

#### **I. Knowledge, Skills, and Abilities:**

Knowledge of:

- the principles and techniques of cartography;
- computer mapping and cartographic design;
- state and federal mapping procedures and guidelines;
- map, statistical chart, and graph preparation;
- computer aided mapping and drafting software;
- color printing methods and procedures;
- personnel and fiscal management.

Ability to:

- establish and apply standards and specifications for the production and printing of maps and other illustrative materials
- establish working relationships with coworkers, other agencies' staff, and the public;
- communicate information clearly and concisely.